

nystatin. Ketoconazole was eight times more potent than fluconazole.

Conclusion and recommendations: All antifungals tested are still efficacious in the treatment of OPC. The Ugandan Ministry of Health and international donors should consider availing more ketoconazole than Fluconazole since the former is several times more superior. Furthermore, there should be continued monitoring of the susceptibility patterns for itraconazole since it's already in the sensitive but dose dependant phase.

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45.027

Sunflower Seed Agar for Rapid Identification of *Cryptococcus neoformans* Clinical Isolates from AIDS Patients in Thailand

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Cryptococcus neoformans is an opportunistic fungal pathogen that often cause the significant illness and death among persons with AIDS. The rapid and accurate identification of *Cryptococcus neoformans* in the clinical laboratory based on the phenoloxidase activity of the organism and there are several media used in this test. We have brought the Pal's medium (Sunflower seed agar) to apply for testing of phenoloxidase activity of *C. neoformans* clinical isolates from AIDS patients in Thailand. We improved the formula and the preparation of Sunflower seed agar which appropriate for the phenoloxidase activity test. Then the test was conducted to the 100 clinical isolates of *C. neoformans* and the findings was that it created the brown colony on the Sunflower seed agar once it hit 16 hours. These brown colonies could be read the positive result clearly after 24 hours. The false positive and negative results were not found which appeared to be the same in the test over the Modified caffeic acid-cornmeal agar and DOPA medium. When comparing the Sunflower seed agar to the other two agar media, the strong point of the Sunflower seed agar is that the price per unit is very cheap, the resource is easier to find in Thailand and the expiration is after 6 month. The hospital laboratories all through the country can use this way without affecting its original diagnosing charge but instead will increase the value added to the service for medical doctors and patients.

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Fungal Infections Etiology at Patients with HIV/AIDS in Timis County Romania

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Background: The mortality rate of HIV/AIDS patients with fungal infections is substantially increasing. We proposed ourselves to study the etiology of fungal infections at a

Methods: the authors have studied 42 adult patients with HIV/AIDS admitted in Department of Infectious Diseases Timisoara, Romania. The positive diagnosis was established based on the physical examination (prolonged feverish, weight loss, malaise, peripheral lymphadenopathy, white depots on the tongue, headache, photophobia etc.), biological samples (number of leukocytes, leukocytary formula, ESR, blood cultures, sputum cultures, ELISA test, Western blot test, glossal exudate and culture on Sabouraud medium, biochemical parameters of cerebrospinal fluid (CSF), culture of CSF on Sabouraud medium etc.) and direct microscopic examination of fungal specimens.

Results: 15 patients (46.87%) have presented glossal candidiasis, 10 (31.25%) have had oropharyngeal candidiasis, 3 patients (9.37%) with esophageal candidiasis, and 4 (12.5%) with acute meningitis; there have been isolated 18 strain (56.25%) of *Candida albicans*, 10 strain (31.25%) of *Candida nonalbicans* from which 3 *Candida glabrata*, 2 *Candida kefir*, 3 *Candida krusei* and 2 *Candida parapsilosis*. *Cryptococcus neoformans* were detected to all patients (4) with acute meningoencephalitis. Out of 18 strain of *Candida albicans*, 5 have been resistance to fluconazole and all with sensitivity to itraconazole. We mention that all strain of *Candida krusei* have been resistance to fluconazole and with sensitivity to itraconazole. The isolation of these species, along with the sensitivity at antifungal drugs test have allowed an antifungal treatment with satisfying results. The patients with oropharyngeal candidiasis had CD4 between 250–350/mm³, the ones with esophageal candidiasis between 250–220 CD4/mm³ and the ones with *Cryptococcus meningitis* under 220 CD4/mm³.

Conclusion: *Candida albicans* remain the main etiologic agent for the oropharyngeal fungal infections and *Cryptococcus neoformans* is the main agent of acute meningoencephalitis in adults with HIV/AIDS.

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Species Distribution and Antifungal Susceptibility of *Candida* sp. Isolates from HIV Positive Patients with Oropharyngeal Candidiasis

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Background: This study aimed to investigate species distribution and in vitro drugs susceptibility of *Candida* sp. isolates from HIV positive patients.

Methods: We studied the frequency of resistance profile to amphotericin B, flucytosine, fluconazole and itraconazole of 50 isolates of *Candida* sp. from newly diagnosed AIDS patients with oropharyngeal candidiasis at Shanghai Public Health Clinical Center, using Neo-Sensitabs tablet assay. We reviewed English language papers pertinent to oropharyngeal candidiasis in HIV positive patients.

Results: *C. albicans* (78%) was the most common *Candida* species isolated from newly diagnosed AIDS patients with oropharyngeal candidiasis, followed by *C. glabrata* (8%), *C. tropicalis* (8%), *C. krusei* (2%), *C. parapsilosis* (2%), *C. guilliermondii* (2%). All these isolates were susceptible to amphotericin B, no *C. albicans* isolates were resistant to fluconazole, the overall resistance of non-*albicans* *Candida* isolates to fluconazole was 36.4%, of which 75% showed cross-resistance to itraconazole. Species distribution and antifungal susceptibility varied among countries.

Conclusions: *C. albicans* is the most frequent *Candida* species isolated from HIV positive patients with oropharyngeal candidiasis, non-*albicans* *Candida* species are increasingly seen. This study shows a trend toward increase in the resistance rate of *Candida* species to azoles. There exist differences in species distribution and antifungal susceptibility of *Candida* isolates from HIV positive patients in different countries.

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Fungal Myositis - Entomophthoromycosis Clinically Mimicking Connective Tissue Disorder - A Case Report

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Basidiobolus ranarum is a fungus of Entomophthoraceae family and is associated usually with subcutaneous mycosis with insidious onset of induration in the subcutaneous tissues in the limbs and trunk. However, muscle and GIT involvement is less common. This case report is of a 17-year-old male with subcutaneous and gastrointestinal involvement who presented with history of difficulty in walking, massive mucus diarrhea and weight loss. Examination revealed severe pallor and induration initially noted in the scapular region and gradually progressing to other sites. Laboratory investigations revealed anemia with raised ESR and CRP and a clinical diagnosis of connective tissue disorder possibly systemic sclerosis was made following which a muscle biopsy was done. Histopathological examination of the latter showed fungi suggestive of Entomophthoromycosis. Patient was subsequently treated with appropriate antifungal therapy resulting in significant symptomatic improvement. As exemplified by this case, the possibility of a deep mycotic infection like entomophthoromycosis should be borne in mind, when multisystem disease is encountered in an immunocompetent patient, especially when Splender-Hoeppli phenomenon is seen in tissue sections.

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Recent Epidemiology of Candida Infections in Hemato-Oncology and Non-Oncology Patients - A Single Center Experience

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Background: With the introduction of newer azoles and echinocandins safety and efficacy of antimycotic therapy has been improved. Morbidity and mortality of severe candida infections remain substantial. In recent years candida non-*albicans* species are often reported to be increasing and are therefore a matter of concern. Up to more than 50% of candida non *albicans* species have been reported within recent candidemia trials. Inadequate and delayed antifungal treatment for candidemia is associated with increased hospital mortality, which has been reported in particular for infections due to *C. glabrata*. While fluconazole has been shown to be inexpensive as well as safe and effective in *Candida albicans*, Amphotericin B desoxycholate has substantial adverse events although being effective in most patients with candidemia due to non-*albicans* species. Since epidemiology in candida infection has been shown to be a moving target, it is of particular interest to focus on recent trends in the epidemiology of non-*albicans* and *C. albicans*. Echinocandins, newer azoles and lipid preparations of amphotericin B offer a broader coverage and may be justified in candidemia prior species identification according to local epidemiology.

Methods: We analyzed recent developments in the epidemiology of *Candida* spp in hemato-oncology and non-oncology adults in a 585 bed teaching hospital in Munich/Germany. 1800 *Candida* spp were identified between 01/06–09/2007. Out of these 1800 species, 295 candida results species were detected from patients being treated on a hematology and oncology ward. They and were compared between *C. albicans* vs. *C. non albicans*.

Results: There was non seasonal influence for candida infections with a median detection of 83 (range 67 to 114) *Candida* spp/months. Within the observation period of 16 months the relationship between *C. albicans* and *Candida non albicans* remained the same. Identified overall species in the hospital (*n* = 1800) were (%): *C. albicans* (73.2); *C. parapsilosis* (0.7); *C. tropicalis* (5.3); *C. glabrata* (12.2); *C. krusei* (1.2) and other species (7.4). A total of 104 species were detected from blood cultures with the following species (%): *C. albicans* (60.6); *C. parapsilosis* (5.8); *C. tropicalis* (10.6); *C. glabrata* (14.4); *C. krusei* (2.9) and other species (5.7). Species (*n* = 295) identified in patients treated on the hematology and oncology unit were as follows (%): *C. albicans* (80.6); *C. tropicalis* (3.4); *C. glabrata* (9.8); *C. krusei* (2.4) and other species (3.8). Comparing non hematology units there was no predominance of *Candida non albicans* species in those patients being treated for cancer on a hematology and oncology ward.

Conclusion: Although predominance towards *Candida non albicans* species has been described elsewhere, *C. albicans* remained the major identified *Candida* species far ahead